

**Provinces Utilities, Inc.**  
**System ID # 0020029**  
**2008 Water Quality Report**

We are pleased to provide you with the 2008 Water Quality Report. This report is designed to inform you of the quality of water we delivered to you over the past year. Our goal is to provide you a safe and dependable supply of drinking water. Our three wells draw from the Patapsco aquifer in Anne Arundel County. An aquifer is a geological formation that contains water.

We are pleased to report that our drinking water meets all federal and state requirements.

Provinces Utilities, Inc. does not hold regular meetings. If you have any questions about this report or your water utility, please contact customer service at (800) 860-4512. We want our customers to be informed about their water utility.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Source Water Assessment, The Maryland Department of the Environment has completed a draft source water assessment for the water systems using confined aquifers in Anne Arundel County. This assessment was based on existing data, geologic reports, sanitary surveys, field inspection and monitoring data. It was determined that the Provinces water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring cadmium and iron, both of which are being removed from the raw water through treatment. If you would like to review the report or have any other questions or concerns regarding it please call our office at 1 (800) 860 – 4512.

Provinces Utilities, Inc. routinely monitors for components in your drinking water according to Federal and State laws. This report covers the period of January 1 to December 31, 2008.

**Definitions:** In these tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- *Standard units (S.U.)* – standard units is a measurement of that particular regulated contaminant.
- *Not-Applicable (N/A)* – Information not applicable/not required for that particular water system or for that particular Rule.
- *Parts per million (ppm) or milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- *Parts per billion (ppb) or micrograms per liter (ug/l)* - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- *Maximum contaminant level (MCL)* - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- *Maximum contaminant level goal (MCLG)* - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- *Maximum Residual Disinfectant Level (MRDL)* - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- *Maximum Residual Disinfectant Goal (MRDLG)* - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Based on certain criteria, some systems may be allowed to monitor for regulated contaminants less often than once a year. In this case, the table will include the date and results of the most recent sampling.

Our system received monitoring waivers for: cyanide, nitrite, asbestos, and combined uranium.

**Inorganic Contaminants**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water AVG.	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Fluoride (ppm)	Daily 2008	No	1.0	0.7	1.2	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

RECEIVED  
JUN 2009  
WATER SUPPLY  
PROGRAM

**Synthetic Organic Chemical Contaminants including pesticides and herbicides**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Di(2-ethylhexyl) phthalate (ppb)	Jan 04	No	0.7	N/A	0	6	Discharge from rubber and chemical factories
Pentachlorophenol (ppb)	Jan 04	No	0.04	N/A	0	1	Discharge from wood preserving factories

**Radiological Contaminants**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/l)	Jan 07	No	4.0	0	15	Erosion of natural deposits
Combined radium (pCi/l)	Jan 07	No	0.8	0	5	Erosion of natural deposits
Radium 226 (pCi/l)	Jan 07	No	0.8	0	5	Erosion of natural deposits

**Volatile Organic Chemical Contaminants**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Ethylbenzene (ppb)	May 2006	No	1.4	N/A	700	700	Discharge from petroleum refineries
Xylenes (Total) (ppm)	May 2006	No	6.1	N/A	10	10	Discharge from petroleum factories; discharge from chemical factories

**Disinfection**

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
Chlorine (ppm) Tested daily	No	1.1	0.5 - 2.1	MRDLG = 4	MRDL = 4	Water additive used to control microbes

Secondary Contaminants are substances that affect the taste, odor, and/or color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

**Water Characteristics Contaminants**

Contaminant (units)	Sample Date	Your Water AVG.	Range Low/High	Secondary MCL
Iron (ppm)	Daily 2008	0.06	0.01 / 0.19	0.3
pH (S.U.)	Daily 2008	7.0	6.5 / 8.4	6.5 to 8.5

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.



Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Provinces Utilities, Inc. is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Please call Customer Service at (800) 860-4512 if you have questions.

We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

## 2008 Violation Summary Table:

### Violation Description

Start

End

No drinking water quality violations were recorded during 2008.



